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# OVULINIA PETAL BLIGHT OF AZALEA

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Azalea (Rhododendron spp.), one of Florida's most popular flowering landscape plants, is frequently devastated by Ovulinia petal blight, also known as Ovulinia flower blight, azalea flower blight, or azalea flower spot. The disease is caused by the fungus Ovulinia azaleae Weiss and is restricted to the flowers. The disease was first reported in South Carolina in 1931 and was subsequently reported throughout the southeastern United States (3). Ovulinia petal blight occurs in outdoor plantings as far north as Connecticut (6), and has now been reported from several countries. Greenhouse-grown azaleas can also be infected. The causal organism was not described until 1940 (3).

**SYMPTOMS:** Symptoms first appear as small (1 mm dia) water-soaked spots on the flower petals (Fig. 1). The brown lesions rapidly enlarge and become slimy; eventually entire petals are affected. Infected flowers are prematurely brown and usually remain on the plant longer than noninfected flowers. Frequently, all flowers on a plant become infected within a few days.

**Fig. 1.** Water-soaked spots caused by Oculinia azaleae on azalea blossoms.

**Fig. 2.** Sclerotia of petal blight fungus on azalea flowers.

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Six to eight weeks after infected flowers dry, small, black selerotia form, embedded in the flower tissue (Fig. 2). As the season progresses, most petals fall to the ground, but some remain on the plant until bloom the following season (3,4,5,6).

**DISEASE CYCLE:** Ovulinia **azaleae** overseasons as sclerotia in diseased flowers on the plants, or lying on the soil surface. At about the same time that the host begins flowering, the sclerotia germinate and within 3 to 5 days produce apothecia; small (1.5-2.5 mm dia), reddish brown "cup fungi". These apothecia produce and discharge ascospores which are the primary source of inoculum. Optimium ascopore germination and infection requires temperatures of around $1.8^0$C (3) during periods of heavy dew or mist.

Infected flowers can serve as a source of secondary inoculum. The fungus (imperfect stage Ovulitis azaleae Buchw.) produces conidia on infected tissues every 3-4 days. These conidia are readily spread by rain, wind, or insects, and are responsible for widespread outbreaks of petal blight (1).

**CONTROL:** Both removal of plant litter and the addition of mulch to inhibit sclerotia germination have been attempted to control petal blight; however, these methods have not proved reliable (5).

Fungicide sprays applied at bud break and repeated at weekly intervals throughout flowering have proved to be the most successful method of control. Contact a county agricultural extension agent or the Florida Plant Disease Control Guide (2) for the most recent chemical control recommendations.

**SURVEY AND DETECTION:** Look for rapidly expanding slimy spots on flowers. Flowers prematurely turn brown and cling to the shrub.

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